

Average Substation Availability Index

The Average Substation Availability Index (ASAI) represents the fraction of time (often in percentage) that a customer has power provided during one year or the defined reporting period.

An ASAI Calculation does NOT contain any outages with the following characteristics:

- Pre-Arranged Outages (maintenance, etc.)
- Unplanned Outages at Customer's Request
- Customer Equipment failure/problem within the Customer's System
- Outages that occur during a Major Storm
- Momentary Outages less than 1 minute in duration

ASAI Formula:

$$ASAI\% = 100 * \{[(Nt * T) - Sm] / [Nt * T]\}$$

Where:

Nt = No. of Substations per index area

T = No. of minutes per year

Sm = Summation of Outage Minutes times No. of Subs affected

ASAI for CY2020 was calculated as follows:

- Nt = 431
- T = 527,040
- SM = 4,298
- $ASAI\% = 100 * \{[(Nt * T) - Sm] / [Nt * T]\}$
- $ASAI\% = 100 * \{[(431 \times 527,040) - 4,298] / [431 \times 527,040]\}$
- $ASAI\% = 100 * \{227,149,942 / 227,154,240\}$
- $ASAI\% = 100 * 0.999981 = 99.9981\%$